

MAY 17 2002

K021256

Special 510(k) Notification  
Medtronic, Inc.  
6F Z3 Guiding Catheter

## Section 9

### 510(k) SUMMARY OF SAFETY AND EFFECTIVENESS (Pursuant to Section 12, Safe Medical Devices Act of 1990)

#### 1. Identifying Information

- |                               |   |
|-------------------------------|---|
| (a) Submitters Name:          | Medtronic AVE, Inc.<br>37A Cherry Hill Drive<br>Danvers, MA 01923 |
| (b) Contact Person:           | Fred L. Boucher R.A.C.<br>(978) 777-0042                          |
| (c) Classification Name:      | Percutaneous Catheter<br>(21 CFR Part 870.1250)                   |
| (d) Proprietary Name:         | Medtronic 6F Z3 Guide Catheter                                    |
| (e) Name of Predicate Devices | Medtronic® 6F Zuma™ and 6F Genius™<br>Guide Catheters             |

#### 2. Description

The Medtronic® Z3 Guide Catheter is constructed with an inner liner, stainless steel braid, segmented outer shaft jacket, sleeve, marker band and a soft distal tip. The inner lumen of the Z3 Guide Catheter has a thin lubricious coating. The Z3 Guiding Catheter (6F) has an inner lumen diameter comparable to the predicate devices.

#### 3. Intended Use

The Medtronic® Z3 Guide Catheter is designed to provide a pathway through which therapeutic devices are introduced. The guiding catheter is intended for use in the coronary or peripheral vascular system.

#### 4. Technological Characteristics

The 6F Z3 Guide Catheters are manufactured similar to the legally marketed predicate 6F Zuma™ and 6F Genius™ Guide Catheters.

The manufacturing processes and design are substantially equivalent to the 6F Genius (K010579) with the exception of some component materials that are the same as materials used in the 6F Zuma Guide Catheter (K981198). The packaging materials are identical to the predicate devices.

5. Biocompatibility tests performed per ISO10993 were chosen based on Guide Catheters categorized as external-communicating devices, circulating blood, limited exposure ( $\leq 24$  hours). The following test results reports have been received and the results demonstrate

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that the tests were successfully performed. All materials used for the Medtronic® Z3 Guiding Catheter passed the following tests:

- Acute Intracutaneous Reactivity
- Acute Systemic Toxicity
- Cytotoxicity
- Hemolysis
- Sensitization (Test in process at the time of this submission.)

6. Functional testing consisted of hub to shaft, shaft, segment to shaft, and distal tip to shaft tensile, torque response, lumen lubricity, radiopacity, pressure shaft burst and hub leak, tip compression (softness). Results verified that the Medtronic® Z3 Guiding Catheter meets all of the applicable specifications and considered an appropriate device for the intended use. Based on a comparison of the intended use, design, in-vitro test results and the fact that the fundamental scientific technology has not changed, the Z3 guide catheter is considered to be substantially equivalent to the following device:
- Medtronic® 6F Zuma™ Guiding Catheter (K98198)
  - Medtronic® 6F Genius™ Guiding Catheter (K010579)



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

MAY 17 2002

Mr. Fred L. Boucher  
Medtronic, Inc.  
37A Cherry Hill Drive  
Danvers, MA 01923

Re: K021256  
Medtronic® Z3 Guide Catheter  
Regulation Number: 870.1250  
Regulation Name: Percutaneous Catheter  
Regulatory Class: II (two)  
Product Code: DQY  
Dated: April 18, 2002  
Received: April 19, 2002

Dear Mr. Boucher:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

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Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4586. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



Donna-Bea Tillman, Ph.D.  
Acting Director  
Division of Cardiovascular and  
Respiratory Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

INDICATIONS FOR USE

510(k) Number: K021256

Device Name: Medtronic® Z3 Guiding Catheter

Indications for Use: The Medtronic® Z3 Guiding Catheter is designed to provide a pathway through which therapeutic devices are introduced. The Z3 catheter is intended to be used in the coronary or peripheral vascular system.

PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF  
NEEDED.

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓ OR Over-The-Counter Use \_\_\_\_\_  
(Per 21 CFR 801.109)

  
Division of Cardiovascular & Respiratory Devices  
510(k) Number K021256